

## A Multimedia Medical Textbook on a Satelitic Network System

Y. Okada, Y. Haruki, Y. Ogushi, Y. Ohta, Y. Hayashi, H. Kimura\*, Ohata\*\*, T. Kon\*\*, H. Mizuno\*\*, M. Horie\*\*\*, I. Endo\*\*\*\*, J. Oshima\*\*\*\*\*, H. Tashiro\*\*\*\*\*  
Tokai University School of Medicine, \*Tokai University Educational System, \*\*Nippon Telegraph and Telephone Corporation, \*\*\*Isehara Medical Association, \*\*\*\*Odawara Medical Association, \*\*\*\*\*Kumagaya Medical Association, \*\*\*\*\*Kumamoto Medical Association

**Background.** An electronic medical textbook - a search system of medical textbook - of internal medicine has been made and evaluated in a hospital information system<sup>1)</sup>. Another electronic medical textbook including medical images has been made on PCs<sup>2)</sup>.

These systems are useful to gather medical knowledge about one patient from spreading descriptions in databases. However, some drawbacks of these systems are pointed out.

Using a satelitic line, we can get high speed and widespread network. We have made a search system of a medical textbook in Japanese and evaluated with traditional textbooks.

**System.** We employ a Japanese medical textbook of urology for this study. It contains 639 pages and 1.4MB of characters. It also contains about 1,000 tables, figures and pictures including Xray photographs and pathological images. 5,000 medical terms in Japanese are extracted from the textbook for searching.

**Evaluation.** Twenty-one fourth grade medical students of Tokai University tried to make reports

using electronic textbook and ordinary textbooks.

**Conclusion.** Students who made high scored reports in traditional textbooks have correlation between skills for information equipment and high scores using the electronic textbook. We can conclude, who have higher skills for electronic information equipment get higher points of tasks in motivated group.

### REFERENCES

1. Okada, Y., Takahashi T., Hirakawa A. (1990) Electronic Medical Textbook for Database Searching. *Japan Journal of Medical Informatics*, 10(2), 151-159.
2. Okada, Y., Yamashita, Y., Takahashi, T. (1995) Multimedia search system for a textbook of urology in Japanese. *MED. INFORM.*, 20(4), 343-348.